# THE MEDICAL NEWS AND LIBRARY.

VOL. XXVI. FEBRUARY, 1868. No. 290.

## CONTENTS.

CLINICS.

CLINICAL LECTURE.

Abstract of a Clinical Lecture on the Pathology and Treatment of the Typhoid State in different Diseases . . . . . 17

HOSPITAL NOTES AND GLEANINGS.

Chronic Urticaria . . . . . 21
Treatment of Acute Articular Rheumatism in the Paris Hospitals . . . . . 22
Cases of Defect of Speech, with Hemiplegia of the Right Side . . . . . 22
Aneurism of the Femoral Artery; Ligature of the External Iliac . . . . . 23

MEDICAL NEWS.

*Domestic Intelligence.*—Mortality of Philadelphia during 1867 . . . . . 24
The Philadelphia College of Pharmacy . 24
Cholera in an Emigrant Ship arrived at New York . . . . . 24
Cincinnati College of Medicine and Surgery . 25
The Cincinnati Medical Repository . . 25
The American Journal of Obstetrics and Diseases of Women and Children . . . 25
Obituary Record . . . . . 25

*Foreign Intelligence.*—Deaths from Inhalation of Chloroform in Paris . . . 25
Yellow Fever treated by Sulphuric Acid Bath 25
Treatment of Stumps by Pneumatic Occlusion . . . . . 26
Beneficial Effects of Perchloride of Iron in the Dressing of Surgical Wounds . . 27
Organisms in the Air, &c. . . . . 27
Nature of Tubercle . . . . . 28
The Ophthalmoscope in Physicians' Practice 29
Refraction-Equivalent of Salts in Solution . 30
Spontaneous Generation . . . . . 30
Biological Society . . . . . 30
The Negroes in Mexico . . . . . 31
Cinchona Cultivation at Darjeeling . . 31
New Society in London . . . . . 31
New Works . . . . . 31
Too Many Journals . . . . . 31
Obituary Record . . . . . 31

HUDSON ON FEVER, 16 PAGES.

## CLINICS.

### CLINICAL LECTURE.

*Abstract of a Clinical Lecture on the Pathology and Treatment of the Typhoid State in different Diseases.* By CHARLES MURCHISON, M.D., F.R.S., Physician and Lecturer on the Practice of Medicine at the Middlesex Hospital, &c.

I PROPOSE in the present lecture to direct your attention to several cases of disease, widely different in their nature, but in all of which there has been a similar group of symptoms, constituting the condition ordinarily known as the "typhoid state."

*Case* 1. William D., aged 23, admitted October 26th, 1866, on the seventh day of an attack of typhus fever, with well-marked eruption; a dry, brown tongue; great delirium and restlessness, and signs of congestion of the lungs. Marked improvement on the fifteenth day. On the eighteenth day, return of the febrile symptoms; an inflammatory swelling over the left parotid, and albumen in the urine. On the nineteenth day, frequent attacks of convulsions, which continued to recur until death by coma on the twentieth day.

After death.—Blood dark and fluid; great hypostatic congestion of lungs; spleen large and soft; kidney presenting the characters of a recent acute nephritis. A large quantity of clear fluid, containing urea, beneath the arachnoid, and in the lateral ventricles.

*Case* 2. John, F., aged 27, admitted December 3d, 1866, on the ninth day of an attack of typhus, with well-marked eruption, a dry, brown tongue, and albuminuria. On the thirteenth day, violent delirium, followed by stupor, floccitatio, and involuntary evacuations, which continued until death on the seventeenth day. No convulsions.

After death.—Blood dark and fluid. Ex-

*Published monthly by HENRY C. LEA, No. 706 & 708 Sansom Street, Philadelphia, for One Dollar a year; also, furnished* GRATUITOUSLY *to all subscribers of the "American Journal of the Medical Sciences," who remit the Annual Subscription, Five Dollars, in advance, in which case both periodicals are sent by mail free of postage.*

☞ *In no case is this periodical sent unless the subscription is paid in advance.*

treme hypostatic congestion of both lungs, the two together weighing sixty-eight ounces. Both kidneys greatly enlarged, weighing together fifteen ounces and a half, their surfaces smooth, and capsules non-adherent, their cortices extremely congested, and the tubes gorged with granular epithelium. Much clear fluid, in which a considerable quantity of urea was detected, at the base of the brain, and in the lateral ventricles.

*Case* 3. John S., aged 44, admitted into the London Fever Hospital, on October 12th, 1863, on the seventh day of an attack of typhus, with copious eruption. On the ninth day, acute delirium, followed by stupor, complete unconsciousness, low muttering delirium, and involuntary motions. On the thirteenth day, urine very scanty and smoky, containing epithelial and blood casts. During the following night, a fit of convulsions, lasting a quarter of an hour, and death by coma half an hour afterwards.

After death.—Blood dark and fluid. Extreme hypostatic congestion of the lungs. Spleen large and soft. The two kidneys together weighing fourteen ounces and a half, their capsules separating readily, and their cortices quite smooth, but very friable, intensely congested, with blood dripping in large quantity from the cut surface; all the uriniferous tubes gorged with opaque granular epithelium, and many of them containing extravasated blood. Much clear fluid in the lateral ventricles and at the base of the brain, which was not examined for urea.

*Case* 4. James P., aged 73, admitted November 13th, 1866, with an eruption of pemphigus over the greater part of the body. Many years before, he had suffered from "typhus," and from a rheumatic attack, but he had never had dropsy. Two years before, the eruption had appeared on his legs, and within the last three months it had spread over his body. Two or three days after the patient's admission, he became very restless and delirious at night; his tongue was dry and brown, and coarse moist *râles* could be heard over the back of the lungs; the urine was scanty, but though examined repeatedly, contained not a trace of albumen, and there was no dropsy. Death by coma occurred on November 21st.

After death.—The blood dark and fluid. The kidneys contracted and granular, their capsules firmly adherent, and their cortices having well-nigh disappeared. Œdema and hypostatic congestion of the lungs. Much clear fluid, containing urea, at the base of the brain, and in the lateral ventricles.

*Case* 5. John K., aged 49, admitted October 27th, 1866, with a gangrenous ulcer of big toe, the result of an injury, jaundice, and albuminuria. About November 15th, the patient became very restless and delirious at night; the tongue was dry and brown; there were signs of hypostatic congestion of the lungs; and the gangrene began to spread up the leg. On November 20th, convulsions occurred, and, after about twenty fits, the patient died comatose on the 21st.

After death.—The cause of the jaundice was ascertained to have been catarrh of the bile-ducts, from irritation of the calculus. Both kidneys were enlarged, and presented the characters of a contracting fatty kidney. Blood dark and fluid. Marked œdema and hypostatic congestion of both lungs. The fluid in the lateral ventricles, and at the base of the brain, was found to contain urea.

*Case* 6. James McW., aged 42, admitted October 15th, 1867, with symptoms of gangrene of the bladder, succeeding those of the passage of a renal calculus. On October 26th, a rigor, followed by fever, with dry, brown tongue, restlessness, and delirium at night, signs of congestion of the base of the lungs, and death, after an attack of convulsions, on November 7th.

After death.—Gangrene of the bladder; great dilatation of the right ureter. Sacculation of the right kidney, with complete destruction of its secreting tissue; numerous small abscesses in the left kidney. Congestion of the lungs. A considerable quantity of clear serum, containing urea in the lateral ventricles, and at the base of the brain.

*Case* 7. Henry P., aged 28, admitted September 13, 1866, with all the ordinary symptoms of rheumatic fever in an intense degree, which had lasted about ten days. There was no cardiac complication. On September 17th, he became suddenly worse; he was heavy and stupid, and could scarcely be roused; the urine was loaded with lithates, but contained no albumen; the tongue was dry and brown; there was now faint pericardial friction. On the following day, he became violently delirious; the temperature was 107° Fahr., and at 5 P. M., he died comatose. An hour before death, the tem-

perature was found by Dr. Murray to be 110 2° Fahr.; indicating an unusually rapid disintegration, or combustion of tissue.

After death.—Blood dark and fluid. A thin layer of recent lymph over surface of heart, but only half an ounce of fluid in pericardium. Both lungs exhibited in a marked degree the characters of hypostatic congestion, as seen after death from typhus. Spleen ten and a half ounces, soft and pulpy, like a "typhus-spleen." Both kidneys enlarged and hyperæmic, weighing together twelve ounces and a half, but surfaces smooth, and capsules separated readily. No fluid in cerebral ventricles.

In this case the products of tissue-metamorphosis, as indicated by the high temperature, were probably in too large quantity for healthy kidneys to eliminate.

*Case* 8. Esther P., aged 26, admitted November 5th, 1867, with febrile symptoms, a dry, brown tongue, and violent delirium. She had been ill for five days before admission, and presented all the symptoms usually observed in a bad case of typhus fever; but, on examination, no eruption could be discovered on the skin, and though there was scarcely any cough, there were all the physical signs of pleuro-pneumonia from base to apex of the left lung, and also at the right base; the urine contained a considerable quantity of albumen. For four days, the patient seemed to get worse; she had no sleep, was extremely delirious, and was with difficulty kept in bed; but at the end of that time, an improvement commenced, both in the symptoms and in the physical signs of the lungs; the albumen entirely disappeared from the urine, and on the 6th of December, the patient left the hospital well.

In the cases now submitted to your notice, the group of symptoms known as the "typhoid state" was the same, notwithstanding the varying nature of the primary maladies. These symptoms are, a quick soft pulse; a dry brown tongue; the symptoms and physical signs of hypostatic congestion of the lungs; impairment of the mental faculties; stupor passing into coma; delirium, which at one time is acute and noisy, at another low and muttering, and not unfrequently associated with muscular tremor; involuntary evacuations; and occasionally subsultus, carphology, or even general convulsions. The precise grouping of the symptoms will vary in different cases even of the same disease, while in diseases essentially different it may be identical.

The post-mortem appearances met with in such cases are a dark fluid condition of the blood; hypostatic congestion and œdema of the lungs; old disease or recent congestion, with epithelial engorgement of the tubes of the kidneys; enlargement and softening of the spleen, and, unless the typhoid state have been of very short duration, an accumulation of serous fluid in the lateral ventricles and at the base of the brain, the veins and sinuses of which are usually full of dark blood.

The typhoid state is developed more commonly in true typhus fever than in any other disease that we are called upon to treat in this country; and accordingly, all diseases in which the typhoid state is apt to be developed are constantly mistaken for typhus, so that the cases registered in official returns as deaths from "typhus," furnish no reliable test of the prevalence of this epidemic fever. The cases sent as typhus to the London Fever Hospital, and in fact, to all Fever Hospitals, from year to year, testify unequivocally to the fact that there is scarcely an acute disease to which flesh is heir which may not in the way pointed out be mistaken for typhus. Next to true typhus, enteric, pythogenic, or the so-called "typhoid fever," is the malady in which the typhoid state is oftenest met with; and this is one reason why it was so long, and is still so often, confounded with typhus. In many cases of enteric fever, it is true, the typhoid state does not appear at all, or only late in the disease, and in the latter case the attack is often, though erroneously, described as "gastric fever passing into typhus." Cases of pneumonia are not uncommon where the symptoms of the local disease are completely masked by those of the general blood-poisoning, in the form of maniacal delirium passing into coma; and there are few medical men who have not met with examples of acute rheumatism passing into a condition indistinguishable from the typhoid state of the typhus, and presenting similar morbid appearances in the solids and fluids after death. Another class of cases very commonly mistaken for typhus is constituted by certain forms of kidney-disease, and particularly the contracted, granular, or "gouty" kidney. In this form of kidney-disease the patient may at no period of his life have suffered from dropsy,

and the urine may contain only a minute trace of albumen; or, as in Case 4, even none at all. The symptoms ordinarily associated with one's ideas of kidney-disease are absent, and therefore when cerebral symptoms supervene, the primary disease is overlooked, and the case is regarded as one of typhus; or, if the attack be sudden or ushered in with convulsions, as one of apoplexy. The "serous apoplexy" of the pathologists of the past age—cases diagnosed as apoplexy during life, but where no apoplectic clot was found in the brain after death—were probably, for the most part, examples of contracted kidney. As physician to the London Fever Hospital, numerous cases of contracted kidney have come under my notice during the last six years in which the cerebral symptoms—the typhoid state—were indistinguishable from those of typhus, and where, failing in any previous history, the only points of distinguishing from typhus have been the absence of any eruption on the skin, and the fact that the temperature has been but little elevated above the healthy standard, except when some local inflammation has complicated the primary disease in the kidney.

I shall now endeavour to explain to you why it is that a similar state of the system is so often produced in the course of diseases so widely different, and to show, in fact, that the pathology of the "typhoid state" in all diseases is probably identical, whatever be the cause of the primary disease.

To take, first, the cases of contracted kidney, it is now generally admitted that the cerebral symptoms are due to a poisoned condition of the blood. There may be differences of opinion as to whether the actual poison is urea or some compound of ammonia; but for our present purpose, it is immaterial to inquire which of these views is the more probable. It is sufficient to know that the blood is poisoned with the products of the retrograde metamorphosis of the nitrogenous tissues, which it is the function of the kidneys to eliminate from the body. The destruction of tissue is not increased beyond the standard of health, but the disease of the kidneys renders them incapable of separating from the blood the normal quantity of the products of that metamorphosis.

Take next, the class of febrile diseases. It is well known that convulsions—a symptom characteristic of an extreme degree of the typhoid state—is not uncommon in scarlatina, and it has long been acknowledged that this symptom is independent of any cerebral lesion, but is due to poisoning of the blood in consequence of inflammation of the kidneys. Convulsions, however, are met with in many other febrile diseases besides scarlatina. I have known them occur in typhus fever a hundred times or more, and I have published evidence to prove that their pathology in typhus is the same as in scarlet fever. The urine contains always more or less albumen; the kidneys after death exhibit traces of disease, old or recent; and in not a few instances (as in Case 1) I have discovered urea in the fluid of the cerebral ventricles. But convulsions, under such circumstances, are only an extreme symptom of the typhoid state. In a large proportion of cases of typhus, even where no convulsions occur, albumen is present in the urine during the second week of the disease where cerebral symptoms are most apt to appear; and in several cases where death has been preceded for some time by the typhoid state, but not by convulsions, I have found (as in Case 2) urea in the cerebral fluid.

And if this be the pathology of the typhoid state in scarlet fever and typhus, it may fairly be inferred that the typhoid state in all febrile diseases, whether they be due, in the first instance, to a specific poison or to a local inflammation, admits of a similar explanation. As in the contracted kidney, the blood is contaminated with the products of tissue metamorphosis, but the cause of contamination is different. It is now well known that in all febrile disease the disintegration or combustion of the tissue is greatly increased beyond the healthy standard. To this is to be ascribed the increased temperature, which is the pathognomonic symptom of the febrile state, and the rapid emaciation. The products of this increased metamorphosis are mainly eliminated by the kidneys, and appear in the urine. As long as the kidneys are equal to the increased work thrown upon them, the blood is properly depurated, and the typhoid state is warded off. But if the kidneys be unequal to the task, either from the large amount of effete material to be eliminated, from previous disease in the secreting tissue, or from congestion resulting (as it often does) from their increased work, then the blood becomes contaminated, and convulsions or

the typhoid state supervene. This explains why albumen so commonly appears in the urine in the course of all acute diseases of a severe form, and why it is so justly regarded as an unfavourable symptom. It also explains why albuminuria is looked upon as a contraindication to any serious surgical operation. The surgical fever which follows an operation is attended by an increased metamorphosis of tissue; and if the kidneys be diseased, the products of the metamorphosis will be retained in the blood, and induce the typhoid state with all its dangers.

If the views now submitted to you as to the pathology of the typhoid state be correct, they furnish material for reflection as to its appropriate treatment. This ought to be directed towards depuration of the blood of the products of tissue-metamorphosis, avoiding, at the same time, all measures which will irritate the kidneys, and interfere still more with their secreting functions. At the present day, existence of the typhoid state is usually regarded as in itself an indication for liberal administration of alcoholic stimulants. Considerable experience of the typhoid state in all diseases has induced me to doubt the wisdom of the practice, and from an experimental inquiry at the London Fever Hospital, in which the patients admitted with typhus fever on alternate days have been treated with and without alcoholic stimulants, I am satisfied that the benefits of late years ascribed to alcohol in the typhoid state have, to say the least, been greatly overrated. Before drawing conclusions as to the good effects of alcohol in typhus, it is necessary to watch the course of the disease where no alcohol has been given, and this precaution has too often been overlooked. At the same time, you must not go way with the impression that stimulants, in moderation, are injurious in all cases where the typhoid state is present. Not unfrequently this condition is accompanied by great impairment of the heart's action, indicated by extreme weakness or irregularity of the radial pulse, a diminution of the cardiac impulse, and weakness with shortening of the first sound. Under such circumstances, stimulants in moderate quantity are unquestionably of use. It is the indiscriminate administration of large quantities of brandy in all cases of the typhoid state that I am induced to condemn, both from theory and from practical experience. Such a practice, it appears to me, is calculated to prove injurious by irritating the kidneys, and thus impeding the elimination of the products of tissue-metamorphosis with which the blood is contaminated. The administration of stimulants must be regulated by the condition of the pulse and heart, and not by the mere existence of the typhoid state.—*Brit. Med. Journ.*, Jan. 4, 1868.

---

## HOSPITAL NOTES AND GLEANINGS.

*Chronic Urticaria.*—This is often a very troublesome affection, and a few hints regarding it, based on hospital experience, will be doubtless acceptable to our readers. Dr. Hillier, physician to the Skin Infirmary of this hospital, considers the disease to be one requiring the utmost discrimination for its treatment. Occasionally a case will be found to depend on one article of diet, which it requires careful inquiries and observation to ascertain. One case was found to be caused by cheese, another by coffee, another by tea. In such cases the mere disuse of the offending article will sometimes cure the disease. When the patient is of a rheumatic tendency, alkaline medicines are of use. In very many cases colchicum is of great service; some of these are probably gouty in their nature. In many of them, however, it is not possible to find any indications of a gouty constitution. Dr. Hillier has seen great benefit from the use of quinia, especially when the attacks occur with marked periodicity. When there is no gastro-intestinal irritation, arsenic has been sometimes found useful. Unfortunately it is not always easy to decide what remedy shall first be tried. One case coming under Dr. Hillier's care from time to time is always cured by a few doses of cod-liver oil. Dilute nitric acid has occasionally been found serviceable.

Of 28 cases of which Dr. Hillier has notes, 9 were either cured or received much benefit from the use of colchicum and alkalies. In 4, quinia was given, of which 3 were cured, and of 1 the result was not known. In 2 cases nitric acid relieved the patient. Of 3 cases under alkaline treatment alone, 2 were cured, and in 1 the result was unknown. Arsenic cured 1 very obstinate case, and aggravated another case.

In all cases of chronic urticaria it is important to inquire as to the possible existence of bugs, fleas, pediculi corporis, or

of the acarus scabiei. It is not uncommon for patients to suffer a long time from urticaria caused by one of these parasites, whilst other signs of their irritation are almost absent. In these cases ointment containing stavesacre or sulphur, with attention to cleanliness of bed and body-linen, will cure the disease. Local applications in other cases appear of little permanent use; lotions or ointments containing chloroform, or nitric or acetic acid lotions, give momentary relief.

Pruriginous strophulus, a disease of infants, closely allied to urticaria, is usually relieved by the syrup of the iodide of iron.

—

*Treatment of Acute Articular Rheumatism in the Paris Hospitals.*—In the Paris hospitals there have been lately a great number of cases of acute articular rheumatism. It is interesting to study the different modes of treatment adopted by the medical men. The greater number give the preference to the sulphate of quinia, but they do not all administer it in the same way. Many practitioners give it only in doses of from 60 to 80 centigrammes, and continue the same while the acuteness of the symptoms continues. M. Monneret gives as much as 4 or 9 grammes of this medicine, but in fractional doses, and with careful observation of its action. Finally, between these two extremes, there is another and apparently very satisfactory mode of administration. At first, the dose is from 80 centigrammes to 1 gramme; it is afterwards gradually increased to 2 grammes or 2 grammes and 90 centigrammes at the end of three or four days. This dose is continued for several days, and then gradually diminished until the cure is decided. It is generally allowed that the sulphate of quinia acts in these cases as a counter-stimulant; but Dr. Frémy, of the Beaujon Hospital, dissents from this view. He maintains that it should from the beginning be given in large doses, because it acts peculiarly as a disturbing medium, by inflicting a more or less violent shock on the animal economy, so as to sharply arrest the course of the disease. From this point of view, although preferring the sulphate of quinia, M. Frémy would willingly employ other active medicines in rather large doses, such as tartrated antimony, opium, etc. No practitioner any longer believes in the influence of sulphate of quinia in the production of cerebral rheumatism, of which apprehensions had been raised by the observations of MM. Bourdon and Vigla. The use of nitrate of potash in the treatment of acute articular rheumatism is nearly abandoned. The same may be said of veratria, formerly lauded by Piedagnel and Aran, and which produced excellent results. Dr. Oulmont, physician to the Lariboisière Hospital, almost exclusively employs digitalis. Guided in his first trials by the researches of Traube in Germany and Hertz in France, M. Oulmont administers an infusion of 1 gramme of the pulverized herb in 120 grammes of water—a teaspoonful every hour. At the end of from thirty-six to forty-eight hours, the pulse and the temperature are lowered; on the third or fourth day, the pulse falls from 20 to 40, and the febrile heat is considerably diminished. At the same time, the rheumatic manifestations rapidly disappear. The cure sometimes takes place in six or seven days, but ordinarily in from twelve to nineteen days. No cerebral or cardiac complications ever supervene. These facts are of such a nature as to encourage experiments on a large scale in the administration of digitalis in acute articular rheumatism. As a matter of course, these different methods of treatment are always accompanied by general or local adjuvants, the ordinary use of which presents no interesting features.—*Brit. Med. Journ.*, Jan. 4, 1866.

—

*Cases of Defect of Speech, with Hemiplegia of the Right Side.*—Within the last few weeks a series of cases, illustrating the connection between hemiplegia of the right side and the loss of the power of speech, or aphasia, have been under Dr. Peacock's care at St. Thomas's Hospital. One of these cases was that of J. E., aged 39, a married woman, but without children, who was admitted on July 19. She had been seized with a fit four days before her admission, when she was taking her supper, and fell off the chair in which she was sitting; and when, after an interval of about half an hour, she recovered her consciousness, she was found to be paralyzed on the right side, and incapable of speaking. She probably had another fit the following night, as she fell out of bed. When admitted, she had complete loss of the power of movement in the right side, and could not utter any articulate sound, so that she had to express her wishes by signs, her

intelligence being apparently unimpaired. About two months after she was received she again had an attack, apparently of an epileptic character, which, however, left her much in the same state as before. During the time she has been in the hospital there has been no material improvement in the state of the right limbs, and she has not been able to utter any articulate sound. It is doubtful whether the sensation is impaired in the paralyzed limbs, but she appears thoroughly conscious, and conveys, indeed, the impression of being a person of unusual intelligence. There is no loss of power over the lips and tongue, and she swallows without any difficulty. She makes signs to indicate her wishes, and sometimes becomes much excited, and cries if her signs are not understood. Attempts have frequently been made to get her to write; but though, when a slate is given to her, she makes marks upon it, there is no resemblance in them to any letters or words.

In the next bed to this patient is one whose case is the very converse to the first, the paralysis being on the left side, and the power of speech being unimpaired. The case is that of a female, H. H., aged 49, unmarried, and who for twelve months, concurring with the cessation of the catamenia, had suffered from symptoms threatening cerebral disease. She was suddenly seized, ten days before her admission, as she was leaving her house to go to church. She first let her prayer-book drop out of her hand, and then fell down, retaining, however, according to her own account, her consciousness all the time. When she attempted to rise she found that she had lost the power over her left side, and she spoke thickly, and had some difficulty in expressing herself; but that soon subsided. When admitted she was completely paralyzed in the left side, but she spoke perfectly distinctly and clearly, and her intelligence seemed unimpaired, though the nurse said that she was disposed to talk too much, and not always rationally. She has not materially improved since her admission, but says she has pains, and feels more power in the paralyzed limbs. Her speech has at no time been at all affected.

In two other cases the right side was paralyzed, though less completely than in the former instances; and in both of them there was some defect in speech, though to a much less marked degree than in the first case. One of them was a female, aged 57, admitted August 4. There were bedsores on the back and hips and on one leg; she had some power over the right arm and leg; and she spoke thickly, and sometimes could with difficulty be understood; occasionally also she made use of wrong terms, addressing her nurse as "sir," and the Doctor as "ma'am," without apparently being conscious of the mistake. Under a tonic course of treatment and careful management, the bedsores rapidly healed, and she partly recovered the use of the paralyzed limbs, but the power of speech and the defect of the memory of words continued much the same during the two months that she was in the hospital.

The fourth case was that of a man with imperfect paralysis of the right side, and some, but not very marked, impairment of speech.—*Med. Times and Gaz.*, Oct. 26, 1867.

—

*Aneurism of the Femoral Artery; Ligature of the External Iliac.*—Geo. B.——, 11 years of age, was admitted into the Huddersfield Infirmary January 29th, 1865. On examination a pulsating tumour was found situated at the lower border of Poupart's ligament, on the left side, about the size of a walnut. The boy stated that he had not much pain except when the tumour was pressed upon, or the leg moved. A very slight difference was found to exist in the size of the legs. Both motion and sensation were considerably impaired, and two sloughs, each about the size of a florin, occupied the dorsum of the left foot. The swelling was first noticed about three months ago, and immediately after recovery from an attack of acute rheumatism, for which the ordinary alkaline treatment had been adopted. Distal compression was tried for some time with no good effect, for the tumour enlarged rapidly, and became very painful. The external iliac artery was tied on February 21st by Mr. Rhodes. After the operation the limb was enveloped in cotton wool, and in six hours the temperature of the leg was found to be almost equal to that of the other. No pulsation could be detected in the tumour after the operation, and it steadily diminished in size during his stay in the infirmary.

The ligature was removed on the tenth day. The wound healed well, and the boy was discharged on the 12th May, able to

walk comfortably with the aid of a stick. Nothing remained of the tumour but a small hard lump about one-fourth its original size. —*Lancet*, Dec. 28, 1867.

---

# MEDICAL NEWS.

## DOMESTIC INTELLIGENCE.

*Mortality of Philadelphia during* 1867 —The total mortality of the city, deducting 770 reported still-born, and 486 deaths from the country, was 12,683, being 2864 less than in 1866, and 3230 less than in 1865.

The following table shows the number of male and female deaths in each month of 1867, as well as the number of boys and girls, and the number aged five years and under:—

| Months. | Males. | Females. | Boys. | Girls. | 5 years and under. |
|---|---|---|---|---|---|
| January . . | 692 | 684 | 323 | 304 | 510 |
| February . . | 548 | 494 | 281 | 259 | 433 |
| March . . . | 584 | 510 | 304 | 248 | 466 |
| April . . . | 560 | 528 | 279 | 254 | 419 |
| May . . . . | 670 | 590 | 345 | 255 | 489 |
| June . . . | 504 | 446 | 252 | 337 | 405 |
| July . . . | 727 | 688 | 488 | 458 | 869 |
| August . . . | 898 | 776 | 619 | 479 | 1023 |
| September . | 526 | 486 | 309 | 254 | 493 |
| October . . | 603 | 574 | 292 | 287 | 485 |
| November . | 488 | 443 | 199 | 187 | 337 |
| December . . | 486 | 488 | 244 | 236 | 398 |
| | 7286 | 6707 | 3935 | 3558 | 6327 |

The deaths of persons 70 years of age and upwards numbered 1289. Of the whole number of deaths 10,385 were natives of the United States and 2728 of foreign countries. The birthplace of the remainder was unknown. The deaths from consumption of the lungs amounted to 1945, being one more than in 1866.

*The Philadelphia College of Pharmacy.* —We are pleased to see it stated that this very useful and active association has taken measures to erect a new and more commodious hall for its accommodation.

A spacious lot of ground has been purchased, and it is the design of the college "to erect a building which, besides ample accommodations for the classes in attendance on the lectures, will contain suitable apartments for library and reading room, and for the museum, which has already outgrown the space provided for it; also an ample assembly room, in which the members of the college and strangers visiting the city may meet for consultation, and for social and professional intercourse. Impressed with the advantages of this kind of association in developing a taste for scientific and practical knowledge, in stimulating to improvement, and creating an honourable professional spirit among individuals of similar pursuits, we intend that the new hall shall be a centre of attraction for the druggists and pharmaceutists of the city—a place where specimens and newly-discovered processes and apparatus may be shown, and where occasional lectures of general interest may be given. By having a resident janitor on the premises, admission can be obtained at all hours, and the several apartments can always be kept in readiness for their appropriate uses."

"A leading design is the location in the new building of a practical laboratory, for experiment and instruction. The Alumni of the college have already subscribed several thousand dollars, part of which has been collected and invested at interest, for the establishment of such a laboratory, but it was appropriately postponed till more suitable apartments could be procured. The great utility of this proposed feature of our college can hardly be over-estimated; in the midst of this great city, we need a practical school, conducted on a sufficiently comprehensive scale, where those branches of chemical science pertaining more especially to medicine and pharmacy can find ample development, where adulterations and sophistications can be detected and exposed, and where all can resort, on the payment of suitably regulated fees, to solve the problems continually arising in the course of their manufacturing pursuits."

*Cholera in an Emigrant Ship arrived at New York.*—The Hamburg emigrant ship Leibnitz, Capt. Bornhead, we learn, sailed for New York, from Hamburg on the 12th Nov. 1867, with 9 cabin, 433 steerage passengers, and a crew of 23 men, making with 8 births on board, a total of 473 souls. There was no surgeon on board.

On the 21st day out a young woman from the Dutchy of Mecklenburg was seized with unmistakable symptoms of cholera, which proved fatal in a few hours.

The disease first made its appearance among the emigrants from Mecklenburg, where the cholera was raging when they took their departure. It increased daily until it had spread through the entire ship, and raged for a period of over four weeks

without interruption. Of 145 who were attacked but 40 survived.

On the arrival of the ship at the quarantine station, New York, Jan. 11th, 1868, the disease was reported to have disappeared, though there were a few patients not entirely convalescent. Of those who died on the voyage thirty-nine were children and sixty-six adults. But one of the crew is among the dead. The captain reports that many cases proved fatal in a few hours. Other patients fought the disease for many days, to be carried off at last and find a resting place at sea. Of those who died eighty-four were from Mecklenburg, where the cholera was epidemic in November last. The majority of the emigrants are of the better class of Germans, and many of them possessed considerable means with which to start in the New World. It is said that the food dealt out to the passengers was of poor quality, and water insufficient and filthy.

It is not merely reprehensible, it is positively criminal, to permit vessels carrying numbers of passengers to leave port without being provided with medical officers, and comforts for the sick.

Timely precautions should be taken at all our sea-ports to prevent, if possible, the invasion of our country by that terrific scourge, cholera, the coming summer.

—

*Cincinnati College of Medicine and Surgery*.—This institution has established a chair of Psychology and Diseases of the Mind, and appointed Dr. J. A. THACKER to be its occupant.

—

*The Cincinnati Medical Repository*.—This is the title of a new journal, edited by Dr. J. A. Thacker, the first number of which appeared in January last. It is to be published monthly and to be devoted to medicine, psychology, and surgery, and the collateral sciences. We extend a cordial greeting to our new co-labourer in the extension of medical knowledge.

—

*The American Journal of Obstetrics and Diseases of Women and Children*.—Messrs. Moorhead, Simpson, and Bond, announce a new journal under the above title, the first number of which is to be published on the 1st of May next, and quarterly thereafter. It is to be edited by Dr. E. Noeggerath and B. T. Dawson.

OBITUARY RECORD.—Died, in Cincinnati, Dec. 6th, 1867, of disease of the brain, Dr. J. P. JUDKINS, Professor of Special Pathology, in the Miami Medical College. Dr. J. was a man of marked ability, and was highly esteemed both professionally and socially.

---

## FOREIGN INTELLIGENCE.

*Deaths from Inhalation of Chloroform in Paris*.—In a late number of the *Gazette des Hôpitaux* we find a detailed account of two such deaths. One took place on the 14th of August last, the subject being a young girl of nineteen. She had taken chloroform, without any unpleasant consequences, three weeks before, to facilitate the excision of warts situated about the vulva. A second operation being necessary, she insisted on having chloroform administered again; and though she inhaled but a small quantity from a compress kept an inch from the face, she presented, after half a minute, symptoms of asphyxia, from which, in spite of the most unremitting efforts, she never recovered. M. Broca took an opportunity, when this case was mentioned at a meeting of the Surgical Society of Paris, to relate a case of his where a boy of seventeen died during an operation for the removal of a cystic tumour of the neck, whilst inhaling chloroform. This latter case was a most painful one, as the patient was seized with most violent excitement whilst a large vein at the bottom of the cyst poured forth much blood. The deligation of the vessel became extremely difficult during the almost uncontrollable convulsions of the boy, and fears were entertained that air might penetrate into the vein. At last the vessel was secured, and the surgeon was proceeding to dress the wound, when, several minutes after the chloroform had been removed, the pulse at the wrist suddenly stopped, and the patient died after artificial respiration had been kept up half an hour. M. Broca thought, at first, that air in the veins had killed the patient; but this view was not confirmed by the autopsy. It was understood, afterwards, that the boy had been subject to epileptic fits.—*Lancet*, Dec. 21, 1867.

—

*Yellow Fever treated by Sulphuric Acid Bath*.—Dr. GRANT, Deputy Inspector-General, at Bermuda, has sent us the full notes of an interesting case of yellow fever treated

by the sulphuric-acid bath, and in which, though the symptoms were very severe, recovery took place. The bath consists of hot water containing two drachms of strong sulphuric acid to each gallon of water. The patient remains in the bath a quarter of an hour, and is afterwards wrapped in blankets, and sponged with the same fluid as that which forms the bath night and morning. From the details given by Dr. Grant, this mode of treatment would seem to act by inducing diaphoresis, thereby lessening at the outset any febrile paroxysms. We regret we have not space to give insertion to the full details of the case.—*Lancet*, Dec. 21, 1867.

[It may be remembered that Dr. J. D. Miller, Surgeon U. S. N., stated (*American Journal of the Medical Sciences*, Oct. 1867, p. 390, *et seq.*) that he had employed in 1863 the hot bath (114° Fahr.), and found it exceedingly efficacious in the treatment of cases of yellow fever of great malignancy which occurred on board the U. S. Frigate Colorado. Whether or not the efficacy of the hot bath is increased by the addition of sulphuric acid can only be determined by clinical experience.—Ed. M. N.]

—

*Treatment of Stumps by Pneumatic Occlusion.*—The Paris correspondent of the *Lancet* (No. for Dec. 21, 1867) gives an interesting account of this mode of treatment of stumps by M. Maisonneuve. A sort of cap, made of caoutchouc, incloses the stump. From this cap a tube leads to a large glass bottle, from which there issues another tube terminated by a small pump; this latter contrivance being destined to draw out the air contained in the whole apparatus and create a *partial* vacuum.

"M. M. believes that pyæmia is due to the absorption of putrid matter which forms in wounds. He does not deny that general causes, such as overcrowding, a vitiated atmosphere, certain variations of temperature, certain states of the system, &c., exercise an influence on the occurrence of pyæmia after surgical operations; but their influence must be limited to this—they merely accelerate the formation of putrid matter. Under certain circumstances the matter remains healthy for a length of time; under other conditions, it speedily becomes putrid—possessed of noxious qualities.—'Take, for example,' he said, 'an every-day occurrence. Under certain conditions of degree or of variability of temperature, the venison which is hung up in your pantry may keep good for days, or become rotten in a couple of hours. In like manner, according to certain individual or general circumstances, exuded matter takes a shorter or a longer time to become putrid.' As an application of this principle, M. M. applies to the wound compresses steeped in a weak solution of carbolic acid, which acts as a disinfectant, or aromatic wine, which *embalms* the matter.

"Well, the putrid matter having once formed, it undoubtedly has a tendency to go up, to be carried away in the circulatory fluid. The ancients knew this; so in the records of former practice—and even now-a-days—you see large pledgets of lint applied to wounds, so as to soak up the pus, and prevent it from lying loose about the wound, and being absorbed. Drainage, not to mention other means, is also of service in the attainment of this object. But M. M affirms that his pneumatic apparatus is the crowning process. His object, therefore, in the application of it, is *not to establish a vacuum*, with a notion that the atmosphere contains gases, the action of which may exercise an injurious influence (as many believe), or germs which may cause decomposition of effused or extravasated matters, according to Professor Lister's theory—his object is merely to rarefy the atmosphere, and by so doing to establish an influence the opposite of that of the absorbents, which may counterbalance or vanquish the tendency to absorption of the putrid matter. According to the surgeon of the Hôtel-Dieu, this object has been attained by the pneumatic apparatus in question. A certain rarefaction of the air about the stump is accomplished, and the putrid matter loses its tendency to travel upwards, and is drawn down in the opposite direction. M. Jules Guérin, who attributes the fatal sequelæ of surgical wounds simply to the noxious properties of the atmosphere, had also tried a pneumatic apparatus; but it was one of perfect occlusion; the vacuum had been made as complete as possible, and the results had been far from satisfactory.

"Such are the principles upon which M. M. has grounded his novel proceeding, and upon which he explains its excellent results. As to its management, it is very simple. As soon as the operation is performed, M. M. washes the wound with alcohol, aromatic wine, or weak solution of carbolic acid;

makes no sutures, but simply applies strips of plaster. He then puts on compresses steeped in either of the three fluids I have just named, and finally adapts the India-rubber cap. The exhausting pump rarefies the air, and the exuded matter runs into the bottle, wherein a certain quantity of a weak solution of carbolic acid has been placed beforehand in order to deodorize the fluids. It is not necessary to renew the pumping very often. The bottle may be opened and cleansed *ad libitum;* and once or twice a day, indeed as often as necessary, the cap may be removed from the stump, and the wound cleaned or the dressing renewed. M. M. is most enthusiastic in regard to this process. He said that the results he had hitherto obtained justifies him in being so; ten or eleven operations, among which were three amputations of the thigh, having been remarkably successful. The case which we had just examined was less so than ordinary. But he had observed one case, an amputation of the thigh, in which, three days after the operation, the wound had been perfectly healed. He had not yet occasion to apply his contrivance to wounds resulting from accidental injuries, so could not judge of its value in such circumstances; but he intended to pursue his researches, and make them as complete as possible."

—

*Beneficial Effects of Perchloride of Iron in the Dressing of Surgical Wounds.*—M. Bourgade, of Clermont Ferrand, in a paper read before the International Medical Congress, extolled this mode of dressing wounds, which he stated to be so beneficial, that of 95 operations which he had performed at the Hôtel Dieu of Clermont Ferrand, and which involved such serious procedures as excision of the breast, amputation of the thigh, &c., death had not occurred in one single instance. With regard to the general accidents which bring on death subsequently to surgical operations, he said that he would lay down three propositions: 1. These accidents were not generally observed in rural districts, whereas they were frequent in large towns, hospitals, ambulances, &c. 2. Even in these last conditions, they rarely supervene after the use of caustics, but frequently after the employment of the knife. 3. When once developed they are almost always fatal. Therefore, their development must be *prevented.* But to effect this, their causes must be known. From the propositions which he had just laid down, it was obvious that wherever a great agglomeration of people existed, there arose some cause which exercised a fatal influence on the cure of wounds exposed to the action of the air. If wounds resulting from caustic got cured, it was because the slough withdrew them from the influence of the noxious cause. Yet the knife must still be the most common and useful agent in the hands of the surgeon. How then could it be managed to withdraw wounds occasioned by the cutting instrument from the noxious influence of air? Mr. Bourgade said that for this purpose the perchloride of iron was an invaluable means. The mode of employment was as follows: After having finished the operation, applied ligatures, washed the wound, &c., he covered the whole of the surface with lint steeped in a solution of perchloride of iron. All the divided tissues, bone, vessels, nerves, &c., must be submitted to the action of the remedy. The lint must be left in the situation until suppuration causes it to fall off. A solid mass is thus produced, an actual magma, which acts in the way of a slough, and preserves the wound from the noxious action of air. Nay, there did exist a real cauterization of the parts through the caustic action of the perchloride. This slough fell off in turn in the space of a few days, and exposed a healthy surface, which M. Bourgade then dressed with aromatic wine. Thus employed, his mode of treatment had been successful in ninety-five cases in which it had been tried. It might be recommended in all cases, and it prevented purulent infection, putrid infection, phlebitis, angioleucitis, osteomyelitis, and subsequent hemorrhage. Of course, good hygienic measures must be coupled with the local treatment.—*Lancet*, Sept. 21, 1867.

—

*Organisms in the Air, &c.*—The recent researches of numerous investigators would tend to prove that we live amid myriads of animalcules, which infest the air we breathe, the food we take, sojourn in our bodies, are cast out in our breath, in our ejecta, and hover perpetually about us, exercising, perhaps, a certain influence over our state of health or disease. For instance, M. Jules Lemaire, whose name has recently been so often quoted in your columns in connection with the much-vexed question of the employment of carbolic acid—M. Jules Lemaire, I say, has undertaken a series of

experiments, in the course of which he has been enabled to discover whole myriads of these little beings in the air which we expire, and in the filth which covers the skin of those who have a natural aversion to soap and water. Thus, M. Davaine, in an interesting memoir recently presented at the Academy of Medicine, and bearing upon the nature of carbuncle, related that in this disease there exist quantities of bacteria in the blood. This fact he had already stated at a former period, but he had not been able to determine whether the bacteria were the cause or the effect of the malady. The results of more recent researches now allow him to specify more precisely "that bacteria are to be found in all carbuncular diseases, of any form whatever; that the supervention of these little beings in the spleen, the liver, and the blood, precedes the occurrence of morbid phenomena; that carbuncular blood ceases to be contagious as soon as the bacteria have disappeared; consequently, that he is justified in considering them as the cause of carbuncular diseases." Meanwhile, M. Poulet, another investigator, informs us that multitudes of infusoria inhabit the air which is expired by children affected with whooping-cough. "The vapour proceeding from the child's breath presented, when examined with the microscope, a whole world of little infusoria. In all the cases they were identical. The more numerous, and, at the same time, the smaller of these animalcules, may be classified with the species which has been described by some as the *monas termo*, and by others as the *bacterium termo*. Others less numerous were seen scampering about under the lens." The observation of these facts led the author to express himself thus: "Whooping-cough, through the changes undergone by the air which is breathed out, must take its place amid the infectious diseases, among which I have examined from an identical point of view smallpox, scarlatina, and typhoid fever. This circumstance had been already brought to light by mere observation of facts, but examination with the microscope had settled it definitely." To conclude this little excursion into the world of the infinitesimal, I may just mention the interesting experimental researches which MM. Coze and Feltz, of Strasbourg, have been making on the presence of infusoria, and of the state of the blood in infectious diseases.—*Lancet*, Jan. 4, 1868.

*Nature of Tubercle.*—The doctrines of M. VILLEMIN relative to the specificity (*la spécificité*) and inoculability of tubercle continue to command the attention of the Academy of Medicine and of the French medical press. It would be unreasonable to expect such doctrines to be readily accepted. They involve so many fine points of pathological anatomy and physiology, and they furthermore involve such an alteration of our old-fashioned notions on the nature and causes of tuberculosis, that some slowness in the reception of them is most reasonable and commendable. To almost disregard hereditary influence, and to be little more respectful of the diathetic peculiarities of the patient, is a bold innovation of teaching on this subject. But these are only the negative features of the new doctrines. The positive features are not less revolutionary. To find the pathological allies of tubercle in the granulations met with in the lungs of glandered horses or in certain syphilitic deposits (*les gommes syphilitiques*) is a bold assertion of anatomical analogies. It is, however, only due to M. Villemin to say that he does not unduly magnify the importance of the mere anatomical or morphological elements of tubercle. He seems to think, as many other observers do, that between mere inflammatory exudation and tubercle there is every gradation of material. He is very explicit in denying that there is anything specific in the morphological constitution of tubercle. Thus he says, the morphological elements which compose tubercle are the same as those of lymph, and as those due to the proliferation of conjunctive corpuscles. "La granulation tuberculeuse ne serait donc qu'une modification du tissu connectif au milieu duquel elle s'est developpée." The proper characters of tubercle —its specificity—are to be studied in its evolutions. The morphological relations of tubercle to the deposits in glanders and syphilis may seem to our readers remote and irrelevant. But it was by the comparative study of different morbid products in the light of recent general principles of anatomy and physiology that M. Villemin was led to practise the inoculation of tubercle, expecting its multiplication. He has just published a book on the subject, in which he expounds his doctrine and refutes objections to it. A copious digest of the contents and arguments of this book will be found in recent numbers of the *Gazette des Hôpi-*

*taux*, to which we are indebted. The whole question is yet in its very infancy. But whether we regard the philosophical method by which M. Villemin was led to his experiments, or the striking conclusions to which he has been led by his experiments, we must regard the idea of the inoculability of tubercle and the zymotic theory of phthisis as among the most interesting and urgent hypotheses of recent medical science. While admitting specificity of the phenomena resulting in animals from inoculation of tubercle—the multiplication of the inoculated substance, with all the signs "of a general infection of the organism, and death from marasmus"—and impressed with the fact that two observers (M. Villemin and Dr. Budd), from different and perfectly independent points of view, have arrived at a zymotic theory of tuberculosis, we cannot but confess the excessive difficulty of reconciling with this theory clinical facts touching the origin and progress of phthisis as we see it in daily experience. Still, clinical observation is apt to be narrow, and to lose sight of the primary facts of disease. So we shall keep our minds open to evidence from all quarters; and in regard to the inoculability of tubercle, we shall remember the observation of Villemin —"Whatever may be the explanation we give of the fact, we must resign ourselves to admit it, and to range tuberculosis among the affections which we attribute to the existence of a morbid germ capable of multiplying itself in the economy, and that, for this reason, we call zymotic maladies."—*Lancet*, Dec. 21, 1867.

—

*The Ophthalmoscope in Physicians' Practice.*—It is stated (*Med. Times and Gaz.*, Jan. 4, 1868) that the ophthalmoscopic appearances in cerebral and other diseases are systematically studied at the Leeds Infirmary by Dr. Allbutt. He attaches great value to them. The wide district from which the Leeds Infirmary is supplied, and the number of its out-patients, would lead us to expect that a large field may be found in Leeds for such investigations. We hear that the great Lunatic Asylum at Wakefield has been kindly thrown open to Dr. Allbutt by Dr. Crichton Browne. It is difficult to conceive that a more magnificent field than this for the study of cerebral diseases can be found. Every form of these diseases may be seen continually represented in this asylum, as there are always about 1200 cases under Dr. Browne's care. We may add that Dr. Browne has kindly permitted the Leeds students to avail themselves (under certain restrictions) of these great advantages.

Dr. Allbutt considers that symptomatic lesions of the eye are, in severe cerebral disease, the rule rather than the exception, and that no case of severe cerebral disease can be considered to be fully reported without notes of ophthalmic observations. In this he strongly supports the views some time held by Dr. Hughlings Jackson, who has published several papers on medical ophthalmoscopy in this journal and elsewhere. We are glad to learn that Dr. Allbutt proposes in a short time to lay formally before the profession certain conclusions at which he has arrived as to the value, in diagnosis and prognosis, of ophthalmoscopical signs. It would be difficult for us at present to give any clear account of his researches. Our earnest object is to beg physicians to follow Dr. Allbutt's example, and to work in the same profitable field. We may just allude, however, to Dr. Allbutt's studies of the state of the optic disks in general paralysis. His chief conclusions seem to be that atrophy of the optic nerves may be observed throughout the whole of its course, in *nearly every case of that disease*. Dr. Allbutt does not attach much diagnostic value to this, but he justly considers it to be of great pathological significance. We think it is an observation of extreme value, and consider that very great credit attaches to him for it. It is a discovery which will, we believe, be useful in throwing light on the minute changes of structure which cause the more characteristic symptoms of this disease. Dr. Allbutt is the first, in England, at least, to have made the observation alluded to. Dr. Westphal, of Berlin, has already published similar results, but Dr. Allbutt's conclusions have been arrived at quite independently.

Dr. Allbutt thinks it very important to us to be able to observe the process known as simple white atrophy from its very commencement. This condition is generally observed by the ophthalmic surgeon when loss of sight (a late and irregular symptom) has set in. The atrophic process is then almost over. The whole question of "optic neuritis" must, according to

this physician, be reconsidered. Mere stasis, with exudation, is too often called optic neuritis, and that name is denied to states which often precede the even-edged white atrophy.

—

*Refraction-Equivalent of Salts in Solution.*—Every body has the power of bending a ray of transmitted light, and this power has been expressed by a number, which physicists term the "*refraction index*"—"*specific refractive energy*" is this refractive index, minus unity, and divided by the density of the body, whatever that may be. This number, when multiplied by the atomic weight of the substance, is termed its *refraction*-equivalent. Gladstone has had a superior apparatus constructed for him by Mr. Browning, and has communicated the results of his observations on the subject of refraction-equivalents at the late meetings of the British Association. He examined a series of salts in solution, in the hopes that it might afford data for determining the refraction-equivalents of all the metals, and of their substance, with which those metals will form soluble salts.

The following is the manner in which we arrive at the refraction-equivalent of a salt in solution. A weight of it, answering to its chemical equivalent, is dissolved in a certain number of equivalents of water. The refraction-equivalent of the whole solution will consist of the refraction-equivalent of the salt, plus so many times the refraction-equivalent of water, and as this number is known, we have only to subtract it from the whole, to obtain the refraction-equivalent desired. The metallic iodides gave refraction-equivalents ranging from 30.5 to 35.3. The metallic bromides ranged from 21.7 to 25 3. The metallic chlorides ranged from 15.1 to 18.6. The highest number in each instance was the potassium salt. It was at once evident that the dispersive equivalent of an iodide was at least double that of a bromide, and three times that of a chloride.

On comparing the salts of the same metal, this difference between the halogens was still better defined, the number for the iodide almost invariably exceeding that for the bromide by a little more than ten, and that for the chloride by a little more than sixteen, therefore the halogens exerted the same influence on the rays of light, with whatever metal it was combined, and that any metal, as calcium, was unchanged in its refraction-equivalent, whether it was united to chlorine, bromine, or iodine. This observation was subsequently extended to a totally different class of salts, the sulphates, which give numbers always about one less than those given by the chlorides.—*Med. Press and Circular*, Nov. 27, 1868.

—

*Spontaneous Generation.*—At the meeting of the French Academy on the 7th, M. Donné, who for the last couple of years has been the strenuous advocate of spontaneous generation, recanted in favour of M. Pasteur's views. He has been led to this result by his last experiment in support of the doctrine of heterogeny. This experiment, like the many others he has from time to time described to the Academy, consisted in placing an egg under a receiver, then allowing water to enter the pores and replace the air, and finally in shaking together the yelk and the white, and allowing them to stand by for some time. Eggs exposed to these conditions for six months showed no traces of living beings even of the most "microscopic" dimensions.—*Med. Times and Gaz.*, Oct. 19, 1867.

—

*Biological Society.*—The Parisian Society of Biology has elected M. Claude Bernard perpetual president, in place of the late Prof. Rayer.

In his inaugural address the newly elected president rendered a just tribute of praise to the memory of his predecessor, to whom the society owes its origin and its prosperity. Reflecting on the progress of medicine and physiology, the President made some general remarks which are worthy to be noted. "It could no longer be allowed," he said, "that there exists any complete divorce between physiology and the other natural sciences. The phenomena of life may admit of being studied in themselves, and with sufficient precision; but we must recognize that there is need to recur to the sciences of natural philosophy and chemistry in the investigation of vital phenomena. In like manner, there can exist no strict line of demarcation between physiology and pathology; still less can it be admitted that these sciences mutually exclude each other. In the history of life, the phenomena which both these sciences investigate

are in close connection, so that physiology may hourly lend most useful assistance to the study of pathology, while pathological effects do oftentimes throw considerable light on physiological researches." The president concluded by returning thanks for his election, and congratulating the society on the feature which distinguished it among the other learned societies of France—namely, an ardent spirit of inquiry into the phenomena of life by means of severe scientific experiment.

—

*The Negroes in Mexico.*—In an interesting memoir on the life and services to science of that eminent statistician and anthropologist, Dr. Boudin, read by M. Perier at the Société d'Anthropologie, he states that the 450 negroes placed at the disposal of France by the Viceroy of Egypt, for service in Mexico, displayed remarkable powers of acclimatization, and made a very pleasant campaign compared with the other troops. They constantly inhabited Vera Cruz and in its vicinity, so fatal to Europeans; and during nearly four years (from July, 1863) they remained entirely refractory to yellow fever; and they bore up in a most marvellous manner against the fatigues of an excessive service, to which, under the local conditions, Mexicans, Turcos, or French, would have certainly succumbed. These men, for the most part, were from Darfur or Kordofan, and rigid Musaulmans. They were well disciplined, carefully attended, properly fed, and well paid.—*Med. Times and Gaz.*, Oct. 5, *from Recueil de Méd. Mil.*, Sept. 1867.

—

*Cinchona Cultivation at Darjealing* is flourishing with great vigour. The gardens have no less than 1,064,758 plants, seedlings, and cuttings of various sizes.

—

*New Society in London.*—A new society called "The Clinical Society of London," has recently been formed. Sir Thomas Watson has been elected President.

—

*New Works.*—A new edition (the 8th) of the well known elaborate treatise on Therapeutics and Materia Medica by M. Trousseau and Pidoux, edited by Constatin Paul, in two large octavo volumes of nearly 1000 pages each, is announced. The first volume has been already published, and the second is promised in April next.

*Too Many Journals.*—It is quite possible to have too many journals, even of strictly scientific contents, to say nothing of journals which are not scientific either in name or spirit. In Germany, for instance, the multiplicity of scientific periodicals has actually become a hindrance to scientific progress. What with the Journal for this, and the Archives for that, with reports and proceedings of innumerable societies, with every little university having its own periodical, and every laboratory publishing its results in intermittent sheets, the study of the results of German biological research cannot be carried on without access to some great public library, or to some extensive private purse; and, when carried on, resembles the process popularly known as looking for a needle in a bottle of hay. Nor is this metaphor at all too strong. Hay is by no means too vehement a term to be applied to a great deal of German writing. Many of the journals are started simply for the purpose of having a journal; and the contents are written in order that the journal may appear at the proper time and place. The consequence is, that facts which might have been recorded in half a dozen pages, are spread out until they occupy as many sheets; and much that ought never to have been written at all is put forward in half a dozen publications at once, and remains for years an awkward stumbling-block and irritating offence to all honest workers and lovers of truth.—*Brit. Med. Journ.*, Jan. 4, 1868.

—

Obituary Record.—Died, Dec. 13th, 1867, aged 72, Charles G. B. Danbury, M.D., F. R. S., Professor of Botany and curator of the Botanic Gardens at Oxford. Dr. D., was a voluminous writer on scientific subjects.

—— in Paris, Dec. 1867, after a long illness, Dr. Flourens, Member and Perpetual Secretary of the Academy of Sciences, Member of the Academy of Medicine, Professor in the Museum of Natural History and the College of France, in the 73d year of his age.

—— at Leeds, Dec. 31, 1867, aged 67, T. Pridgin Teale, F. R. C. S., F. R. S., Senior Surgeon to the Leeds Infirmary. Dr. T. was highly esteemed not only for his eminent surgical abilities, but also for his great personal worth

**WALES ON SURGICAL OPERATIONS, &c.—Now Ready.**

# MECHANICAL THERAPEUTICS;

## A PRACTICAL TREATISE ON SURGICAL APPARATUS, APPLIANCES, AND ELEMENTARY OPERATIONS;

EMBRACING MINOR SURGERY, BANDAGING, ORTHOPRAXY, AND THE TREATMENT OF FRACTURES AND DISLOCATIONS.

By PHILIP S. WALES, M. D., Surgeon U. S. N.

With six hundred and forty-two illustrations on wood.

In one handsome octavo volume of about 700 pages; extra cloth, $5 75; leather, $6 75.

### CONTENTS.

PART I.—Of the Apparatus of Dressing.

Chap. I. Of the Instruments of Dressing.—II. Of the First Pieces of Dressing.—III. On the Use of some Topical Remedies.—IV. On the Use of Water in Surgical Dressings and Injuries.—V. Injections.—VI. On the Use of Gases and Vapors.—VII. Bandages.—VIII. Special or Regional Bandaging.

PART II. Mechanical Bandages and Apparatus.

Chap. I. Apparatus for Remedying Loss of Parts.—II. Apparatus for Remedying Loss of Function.—III. Apparatus for Remedying Loss of Symmetry.

PART III. Fractures; their Reduction, Dressing, and Apparatus.

Chap. I. General Consideration of Fractures.—II. Fractures of Particular Bones.

PART IV. Dislocations; their Reduction, Dressing, and Apparatus.

Chap. I. Sprains or Strains.—II. Dislocations in General.—III. Particular Dislocations.

PART V. The Minor Operations of Surgery.

Chap. I. Rubefaction.—II. Vesication.—III. Cauterization.—IV. Moxa.—V. Issues.—VI. Setons.—VII. Acupuncture and Electropuncture.—VIII. Puncturing.—IX. Vaccination.—X. Incisions.—XI. Bloodletting.—XII. Extraction of Teeth.—XIII. Catheterism.—XIV. Removal of Foreign Bodies.—XV. On the Modes of Arresting Hemorrhage.—XVI. On the Dressings of Wounds.—XVII. Anæsthesia.

**A Naval Medical Board directed to examine and report upon the merits of the volume, officially states that "it should in our opinion become a standard work in the hands of every naval surgeon;" and its adoption for use in both the Army and Navy of the United States is sufficient guarantee of its adaptation to the needs of every day practice.**

This volume will be a useful acquisition to a large number of the working members of the medical profession in this country. The idle and the ignorant will be apt to resort to it on account of the ease and certainty with which its many practical hints and precepts may be appealed to in their emergencies, and to help them out of trouble; and multitudes of better qualified and worthier practitioners will find material aid and encouragement in its pages which they could nowhere else obtain to the same extent in so convenient a form. It must prove scarcely less desirable to teachers and students, on account of the general clearness and brevity of the descriptions, the directly practical character of the illustrative explanations and appreciations, and the convenient order of arrangement; at the same time that the range of topics is so comprehensive that something may be found in relation to almost every question in mechanical surgery not involving major operations. This is high praise; but it is no more than a careful examination obliges us to give. It is manifestly not the production of a book-maker, but is the result of a labor of love growing almost spontaneously out of the unusual opportunities of a long-continued hospital life in the midst of active war. Its recent completion secures the advantage of being *au courant* in a great degree with the latest improvements, and with the rapid accumulation of surgical expedients which characterizes the advancement of the surgery of the day.—*Am. Journ. Med. Sciences*, Jan. 1868.

A work of great value both to the student and the practitioner.—*Chicago Med. Examiner*, Jan. 1868.

Dr. Wales' book is a very excellent one. It includes all forms of dressing, from the simplest to the most complicated. Writers are too apt to overlook as trivial many things that by reason of constant need the beginner especially desires to understand. The author begins with the first dressing of lint, charpie, poultices, etc.; gives formulas for useful cerates and lotions, then proceeds to describe the various methods and kinds of bandaging, the generalities of operations, with the instruments employed, a great variety of splints, a large portion of which are figured, together with the usual manipulations for reducing dislocations. So complete a work as is this will be an acquisition to any medical library.—*The Medical Gazette*, New York, Dec. 21, 1867.

A recent manual, then, which places us *au courant* with reference to these matters, is a boon not to be lightly set aside. Such a manual the 685 pages included under the above title appear to be. The book seems to be complete in every respect, and is a welcome addition to our shelves. Not its least attraction in our eyes is the abundance of woodcuts with which it is illustrated, and which are drawn from various sources.—*Boston Med. and Surg. Journ.*, Jan. 9, 1868.

The illustrations are full, and the description of the form and mode of application of the numerous apparatus and appliances of the art of surgery so complete, that it seems to us that any one with an ordinary amount of surgical knowledge and mechanical skill may, with the aid of this volume, be able both to select and apply the proper apparatus, so as to secure the benefits possible in any given case. In our opinion, it is a good book, and one which every student and practitioner needs in his library. Especially would its value be appreciated by the surgeon whose field of practice is anywise remote from the larger cities, and where he has no full assortment of apparatus from which he may select in the treatment of particular cases.—*Chicago Med. Journal*, Jan. 1868.

HENRY C. LEA, Philadelphia.